



EPYX
COMPUTER SOFTWARE

RUSH WARE
Online with the best!

Strategy Games for the Action-Game Player.



Commodore C64

Deutsch/Englisch



Willkommen an Bord, Captain.

Sie sind bereit, den Gefahren Ihrer sieben Missionen ins Auge zu sehen und zu kämpfen, wann immer es nötig ist.

Als Kapitän haben Sie die Verantwortung für ein hervorragendes Schiff mit einer exzellenten Crew.

Sie müssen auf den stürmischen Gewässern des Nordatlantik genauso zuhause sein wie vor den Korallenriffen der Südsee.

Hochmoderne Technik steht Ihnen zur Verfügung: Radar, Sonar, Navigations-Screen und verschiedene Flugzeug- und U-Boot-Abwehr-Systeme.

Wenn Sie jetzt hinausfahren, verteidigen Sie die freiheitliche Schifffahrt auf den Meeren der Welt.

- Realistische Darstellung der verschiedenen Verteidigungssituationen
- Sieben gefährliche Missionen
- Spannende Action- und Strategieelemente
- 1 Spieler

Now it's your turn, Captain.

The time: 1400 hours. Somewhere in the Pacific.

For weeks the sea has been calm. But now, it's taken an awful, violent turn for the worse. A powerful reminder of the awesome responsibility you face as Captain of a fully-armed, Fletcher Class U.S. Naval Destroyer.

Using radar and sonar to keep track of yourself and enemy ships, subs, and aircraft, you plot your course of action.

- A completely realistic combat simulation featuring graphic action and explicit detail.
- Command anti-aircraft guns, torpedoes, radar, navigation, the bridge, or any of 5 other terrifying stations on deck. Or let autopilot take over.
- Conduct a seek and kill sub hunt. A convoy escort. A bold rescue. Or 4 other progressively difficult scenarios, for a different mission every time.
- Combines the best of strategic level war games and gut-wrenching action.

Dieses Programm ist urheberrechtlich geschützt und darf nur privat genutzt werden. Gewerbliche Nutzung, Verleih, Tauschgeschäfte, Rückkauf, Kopierung bzw. Vervielfältigungen sind untersagt. Zu widerhandlung wird zivilrechtlich und strafrechtlich verfolgt.

RUSH WARE

EDYX
COMPUTER SOFTWARE



Bedienungsanleitung Commodore 64 + 128

Willkommen an Bord, Captain.

Sind Sie bereit, den Gefahren Ihrer Mission ins Auge zu sehen und zu kämpfen, wann immer es nötig ist?

Haben Sie das Zeug, Ihre Leute sicher über den Nordatlantik zu geleiten?

Können Sie Ihre Männer ebenso sicher durch die messerscharfen Korallenriffe der Südsee zu Ihren Landungspunkten bringen?

Und zuletzt: Sind Sie in der Lage, sich im Kampf auf hoher See zu behaupten?

Sie haben ein hervorragendes Schiff mit einer exzellenten Crew.

Ziel des Spiels ist, die vorgegebenen Missionen zu erfüllen, ohne dabei versenkt zu werden. Jede Aufgabe stellt andere Anforderungen an Sie. Handels-schiffen Geleitschutz geben gehört beispielsweise genauso dazu wie Transporte anderer wichtiger Dinge.

Sind jedoch zehn oder mehr Ihrer Stationen beschädigt, sinkt Ihr Schiff und Sie haben verloren. Also halten Sie alles gut instand. Viel Glück!

Ladeanweisung

Stellen Sie Ihren Commodore 64/128 und das Diskettenlaufwerk, wie im Handbuch beschrieben, auf. (Der 128er muß im 64er-Modus sein.)

Stecken Sie den Joystick in Port 2.

Schalten Sie jetzt den Computer und das Diskettenlaufwerk ein.

Legen Sie die Spieldiskette mit dem Etikett nach oben ein.

Diskette: Tippen Sie: LOAD*** R.1 und drücken dann die RETURN-Taste.

Laden mit der EPYX FASTLOAD Cartridge

Stecken Sie das Modul in den dafür vorgesehenen Slot.

Schalten Sie Computer und Diskettenlaufwerk ein.

Legen Sie die Diskette, wie oben beschrieben, ein.

Drücken Sie die COMMODORE- und die RUN/STOP-Taste gleichzeitig herunter.

Kassette: Drücken Sie gleichzeitig die SHIFT- und die RUN/STOP-Tasten herunter. Betätigen Sie nach der Bildschirmmeldung des Computers die Play-Taste Ihres Datenrecorders.

Der Titelbildschirm erscheint.

Drücken Sie den Feuerknopf, damit es weitergeht. Tippen Sie, wenn vom Programm verlangt, Ihren Namen und den Namen des Schiffes ein und drücken dann die RETURN-Taste.

Wählen Sie nun unter den sieben Möglichkeiten: suchen Sie sich zuerst Ihre Mission aus und bestimmen dann den Schwierigkeitsgrad.

Die Auswahl erfolgt alleine mit dem Joystick. Die von Ihnen angewählten Felder sind gelb gekennzeichnet.

Wenn Sie fertig sind, bewegen Sie den Joystick zu START GAME und drücken dann den Feuerknopf.

Daraufhin bekommen Sie Ihre Order und alle anderen Informationen zu Ihrem Auftrag.

Drücken Sie zum Start den Feuerknopf.

SUBHUNTER

Sie haben den Auftrag, ein feindliches U-Boot aufzuspüren und zu vernichten.

Benutzen Sie das Sonar zum Aufspüren des Feindes und zum Hinmanövrieren.

Wenn Sie genau über dem U-Boot stehen, setzen Sie Ihre Unterwasserbewaffnung ein.

SCREEN

Ihre Truppe befindet sich südlich von Ihnen. Von Norden aus bewegen sich mehrere feindliche Flugzeuge auf Ihre Leute zu. Beschützen Sie Ihre Männer um jeden Preis!

Wenn Ihr Radar die feindlichen Flieger geortet hat, können Sie Ihre Flak (Anti Aircraft Guns) bereitmachen, um sich Ihrer Haut zu wehren.

SCOUT

Ein wichtiger Convoy muß eine unübersichtliche Meerenge passieren.

Sie haben als Scout die Aufgabe, feindliche Patrouillen aufzuspüren. Sobald Sie einen Kontrollpunkt erreicht haben, werden Sie benachrichtigt. Halten Sie während Ihrer Erkundungsfahrt Funkstille, bis Sie zurück sind. Nach Ihrer Ankunft können Sie Meldung machen. Vermeiden Sie Kampfhandlungen, damit der Feind nicht merkt, was Sie vorhaben.

BOMBARDEMENT

Die Marines kommen!

Manövriren Sie nahe am Strand und achten Sie dort auf die Lichtblitze, die von den feindlichen Geschossen herrühren.

Erwidern Sie das Feuer mit Ihren mächtigen Bordkanonen und vernichten Sie die gegnerischen Flugzeuge mit Ihrer Flak.

Eine Kombination von guter Radarbeobachtung, Umsicht und großer Treffsicherheit ist nötig, um diese Aufgabe zu lösen.

BLOCKADE RUNNER

Einer unserer feindlichen Inselstützpunkte ist von feindlichen Truppen umstellt. Die Garnison braucht dringend bestimmte Versorgungsgüter, um durchzuhalten.

Durchbrechen Sie mit Ihrer erfahrenen Mannschaft die Blockade.

Alle Stationen müssen ausgezeichnet funktionieren, um der vielfachen Bedrohung durch Schiffe, U-Boote und Fighter standzuhalten.

CONVOY ESCORT

Sie wurden dafür ausgesucht, einem aus Handels-schiffen bestehenden Convoy Begleitschutz zu gewähren.

Ihr Bestimmungsort ist ein vom Gegner belagter Inselstützpunkt, der sich tief im Feindgebiet befindet.

Ihre zugewiesene Position befindet sich im linken vorderen Sektor vor dem Convoy. Ihre Schwesterschiffe befinden sich in anderen Sektoren.

Geleiten Sie die Schiffe sicher an Ihren Bestimmungsort – ungeachtet der feindlichen Aktivitäten.

Alle zur Verfügung stehenden Systeme werden benötigt.

RESCUE

Ein Pilot aus Ihrem Team ist innerhalb Ihres Aktionsbereiches abgeschossen worden, aber hat es noch bis zu einer kleinen Inselkette geschafft.

Retten Sie ihn schnellstmöglichst, denn das Leuchtefeuer wird immer schwächer, und bringen Sie ihn zurück zur Basis.

Der Pilot wird, sobald er Sie sieht, seine SOS-Signale mit einem Spiegel geben.

Seien Sie vorsichtig, es könnte auch feindliches Gewehrfeuer sein!

Alle zur Verfügung stehenden Signale werden benötigt.

Die Kontrollen

Einen Zerstörer zu steuern und ihn im Kampf einzusetzen ist nicht einfach.

Aus diesem Grund sind die Kontrollen nach Stationen aufgeteilt. Jede Waffenart und jeder Sensor ist einer besonderen Station zugeordnet (mit Brücke und Schadenskontrolle).

Jede Station hat einen anderen Bildschirm. Sie können die einzelnen Stationen durch Eintippen der unten auf geführten Abkürzungen anwählen (anschließend die RETURN-Taste betätigen). Wenn Sie sich für eine Station entschieden haben, erfolgt die weitere Kontrolle mit dem Joystick.

Abkürzung Station

BR	Bridge (Brücke)
NA	Navigation
OB	Observation Deck (Beobachtungsdeck)
RA	Radar
SO	Sonar
GF	Guns forward (Kanonen vorne)
GA	Guns aft. (Kanonen achtern)
AP	Anti-Aircraft-Guns Port (Flak backbord)
AS	Anti-Aircraft-Guns Starboard (Flak steuerbord)
DC	Depth Charges (Unterwasser-Minen)
DA	Damage Control (Schadenskontrolle)

Außerdem gibt es noch zwei weitere Möglichkeiten, von denen in ganz bestimmten Situationen Gebrauch gemacht werden kann:

TR aktiviert das Zielradar (bei Gebrauch der Bordkanonen)

AB Abandon Ship (das Schiff aufgeben wenn nichts mehr geht oder die Lage aussichtslos ist). Die Mission wird abgebrochen.

Das Ruder

Eine bestimmte Anzahl von Kontrollen erscheinen am unteren Rand des Bildschirms in vier der oben aufgeführten Stationen (Beobachtungsdeck, Brücke, Radar und Sonar):

Steer To: ermöglicht die Bestimmung des Kurses. Die Richtung kann durch Links-/Rechts-Bewegung

gen des Joysticks festgelegt werden. Der neue Kurs wird in der Mitte der Skala angezeigt. Drücken Sie den Feuerknopf, um auf Automatik zu stellen. Die Skala wird daraufhin schwarz, um dies anzuzeigen. Eine erneute Kursänderung ist erst nach nochmaligem Drücken des Feuerknopfes möglich. Auf der Brücke wird die automatische Steuerung durch den AUT-Schalter angezeigt.

Current Heading: zeigt die genaue Richtung an. Natürlich dauert es etwas, 3000 Tonnen zu wenden; wundern Sie sich also nicht über die Skala.

SPD (Drosselklappe): Kontrolle der Maschinengeschwindigkeit

Full	(Volle Kraft)
Half	(Halbe Kraft)
Slow	(langsam)
Stop	
Slow Reverse	(langsam rückwärts)

Current Speed: augenblickliche Geschwindigkeit in Knoten gemessen.

DIE STATIONEN

NA: Navigation

Jedes der 100 Quadrate auf der Karte hat eine Seitenlänge von 5000 Yards.

Ihre Position wird durch den weißen „Blip“ angezeigt, Inseln durch weiße Quadrate, zu Ihrer Seite gehörige Schiffe durch sich bewegende Punkte und Ihre Basis als :: dargestellt.

Es kann ein Kurs mit bis zu 4 Anlauf-/Zielpunkten festgelegt werden.

Kurs setzen: Feuerknopf drücken, Joystick zum ersten Zielpunkt bewegen, dann erneut Feuerknopf drücken.

Es erscheint eine Kugel rechts von Ihrem Log-Eintrag am unteren Bildschirmrand.

Wiederholen Sie den Vorgang, bis der vierte Punkt festgelegt worden ist und drücken Sie zum Schluß den Feuerknopf zweimal herunter.

Eine Kursänderung kann getätig werden, wenn das entsprechende Licht am oberen linken Bildschirmrand blinkt.

Aufzeichnungen über Ihren Kurs finden Sie mit Angabe von Längen- und Breitengrad in der unteren Bildschirmhälfte.

Bei Erreichen jedes Punktes kommt eine weitere Kugel hinzu.

BR: Brücke

Die verschiedenen Reihen der Kontrollen erreichen Sie durch Vor- und Rückwärtsbewegen des Joysticks, und die einzelnen Kontrollen in jeder Reihe durch Rechts-/Links-Bewegungen des Joysticks.

Wenn eine Kontrolle aktiviert wurde, leuchtet das sich ihr am nächsten befindliche blaue Licht auf.

Das Ein- und Ausschalten der Schalter erfolgt mit dem Feuerknopf. Schalter ein – gelbes Licht, Schalter aus – grünes Licht.

Die oberste Reihe ist für die Statusmeldungen von Sonar, Radar und Schadenskontrolle zuständig.

Wenn man die Schalter betätig, bekommt man den jeweiligen Statusbericht.

Die zweite Reihe ist für die Ruderkontrollen zuständig.

PUR (Pursuit): das Schiff folgt dem nächstliegenden feindlichen U-Boot. Sie können sich dadurch ausschließlich auf die Bekämpfung des U-Bootes konzentrieren.

EVA (Evasive Action): einen den Feind irreführenden Kurs fahren.

AUT (Auto): Kursautomatik. Sie können sich jetzt mehr mit Radar, Sonar und Gebietserkundung befassen.

MAN (Manual): Falls ein besonderes Manöver erforderlich ist, wird jetzt selbst gesteuert. Der festgelegte Kurs wird solange unterbrochen, bis wieder AUT gewählt wird.

Die dritte Reihe ist für den Mannschaftsstatus zuständig.

GQ (General Quarters): Alle Waffensysteme sind aktiviert und feuern solange automatisch, bis Sie eine bestimmte Station direkt anwählen.

Cond2 (Condition 2): Auswahl bestimmter Waffensysteme (erfolgt in der untersten Reihe).

Cond3 (Condition 3): Alle Waffensysteme sofort abschalten.

Wenn eine Station zu lange aktiviert ist, wird die Crew müde und arbeitet schlechter.

Aktivieren Sie also die einzelnen Stationen nur, wenn und solange es nötig ist.

Die vierte und letzte Reihe kontrolliert die Waffensysteme automatisch.

Doppelte Waffensysteme (z.B. Torpedos, Flak) werden immer paarweise aktiviert und deaktiviert.

M: Kanonen (vorne und achtern)

AA: Flak (steuer- und backbord)

TP: Torpedos (steuer- und backbord)

DC: Unterwasserminen (achtern)

Am unteren Bildschirmrand befinden sich die Ge-

schwindigkeits- und Richtungskontrollen und -anzeigen.

OB: Beobachtungsdeck

Der Sichtwinkel wird auf der Skala angezeigt und ist vom eigentlichen Kurs unabhängig.

Drücken Sie erst den Joystick nach vorne, wählen Ihr Fenster und bestätigen mit dem Feuerknopf.

Die Bildumrandung verfärbt sich jetzt von einem hellen in ein etwas dunkleres Grau.

Wenn die Umrandung noch hellgrau ist, ändern Sie Ihren Sichtwinkel durch Rechts-/Links-Bewegungen des Joysticks.

Drücken Sie den Feuerknopf für Sicht nach vorne.

Die Umrandung verfärbt sich solange, bis Sie den Feuerknopf drücken.

RA: Radar

Reichweite ungefähr 13500 Yards.

Inseln werden als weiße Quadrate, Schiffe als „Blips“ und Flugzeuge als Plus-Zeichen dargestellt.

SO: Sonar

Reichweite ungefähr 13500 Yards.

Feindliche U-Boote werden als „Blips“ dargestellt. Sich schnell fortbewegende „Blips“ sind Torpedos.

GF, GA: Bordkanonen

Schußrichtungsänderungen werden mit dem Joystick (nach rechts, links, oben, unten) vorgenommen, Feuern mit Feuerknopf.

TR: Zielradar

Tippen Sie zusätzlich TR ein und drücken dann die RETURN-Taste. Das blaue Kontrolllicht an der linken unteren Bildschirmhälfte geht an. Sollte das Zielradar defekt sein, leuchtet das rote Licht auf.

Das Radar kann mit Links-/Rechts-Bewegungen des Joysticks auf einen der „Blips“ auf dem Radarschirm eingestellt werden. Das gelbe Licht zeigt an, daß noch gerechnet wird. Wenn das grüne Licht aufleuchtet, drücken Sie anschließend den Feuerknopf.

Das Ziel ist jetzt eingestellt.

Stimmen Sie jetzt die Zeiger unter TRAIN und POINT mit den Zeigern darunter mit dem Joystick (alle vier Richtungen) ab.

Betätigen Sie danach den Feuerknopf, um zu schießen.

Warten Sie ab, bis neu geladen ist.

Wiederholen Sie diese Aktion so lange, bis das Ziel vernichtet ist. Danach können Sie zum nächsten Angriffspunkt übergehen.

AP, AS: Flak backbord und steuerbord

Schußrichtungssänderungen erfolgen mit Joystick (Rechts, Links, Oben, Unten).

Ein Flugzeug visieren Sie an, indem Sie die Maschine genau in das Fadenkreuz bringen und dann sofort den Feuerknopf drücken.

Feuerknopf drücken und sofort wieder loslassen = einzelne Schüsse

Feuerknopf heruntergedrückt halten = Dauerfeuer.

Bei Dauerfeuer unbedingt auf die Temperaturanzeige achten! Ein rotes Temperatur-Kontrolllicht zeigt Überhitzung der Systeme an.

TP, TS: Torpedos backbord und steuerbord

Wenn der Zielpunkt über einem feindlichen Schiff steht, Torpedos mit Rechts-/Links-Bewegungen des Joysticks ausrichten.

Abfeuern des Torpedos mit dem Feuerknopf.

Wenn die Kontrolllampe unter der Stationsnummer grün ist, sind die Torpedos einsatzbereit, bei rotem Licht ist die Station beschädigt.

DC: Unterwasser-Minen

Die Auswahl erfolgt durch Rechts-/Linksbewegungen des Joysticks. Das blaue Licht der angewählten Waffe blinkt blau, wenn sie bereit ist, und rot, wenn nicht.

Die Auswahl der Tiefe erfolgt durch Bewegen des Joysticks nach vorne und hinten, Abfeuern mit Feuerknopf.

DA: Schadenskontrolle

Vier Teams, nach Geschwindigkeit geordnet, stehen für Reparaturen zur Verfügung: ALPHA (rot), BAKER (gelb), CHARLIE (blau) und DELTA (grün). Wählen Sie das gewünschte Team mit dem Joystick (vor/zurück) aus.

Wählen Sie dann die zu reparierende Station mit dem Joystick (Rechts/Links) aus.

Drücken Sie den Feuerknopf, um einen Bericht des Reparaturteams anzufordern.

Um eine Crew wieder freizusetzen „kreisen“ Sie mit dem Joystick durch die Liste und verlassen den Bildschirm oben links oder unten rechts. Das Reparaturteam lädt, außer den Torpedos, die Munition wieder nach, wenn die Reparaturarbeiten abgeschlossen sind.

CONTROLS

A destroyer can be a complicated ship to sail and fight. To make control easier, all controls have been separated into Stations. Each weapon type and sensor has a Station, along with the Bridge and Damage Control.

All stations are shown on different screens. You can access these stations by typing in the two letter codes and then pressing **RETURN**. The commands (and any appropriate responses) will be shown on the message line located toward the bottom of the screen. Once a station has been selected, the controls are manipulated using the joystick.

Keyboard Station

BR	Bridge
NA	Navigation
OB	Observation Deck
RA	Radar
SO	Sonar
GF, GA	Guns Forward/Guns Aft
AP, AS	Anti-Aircraft Guns Port/Anti-Aircraft Guns Starboard
TP, TS	Torpedoes Port/Torpedoes Starboard
DC	Depth Charges
DA	Damage Control

There are also two additional codes to be used in particular circumstances:

TR: Used at the Surface Guns station to activate the Targeting Radar.

AB: When all else fails – Abandon Ship to end the current mission.

Helm

There is a special set of controls that appears at the bottom of the screen on four of the stations above (Observation Deck, Bridge, Radar and Sonar). This special section is called the Helm. It allows you to control the heading and speed of the ship. Push the joystick **FORWARD** or pull **BACK** until the green light flashes next to the item you wish to change.

STEER TO allows you to set the course you wish to follow. **RIGHT** and **LEFT** movements of the joystick will move the dial right and left. The new course setting is shown at the center of the dial under the marker. Press the **FIRE BUTTON** to set it to automatic. The dial will turn black to indicate this, and the joystick has no effect until the **FIRE BUTTON** is pressed again. (When on automatic, the **AUT** switch at the Bridge reflects the same.)

CURRENT HEADING shows exactly where the bow of the Destroyer is pointing. It takes time to turn a 3,000 ton ship around, so don't be surprised if you see that dial moving after a new heading (**STEER TO**) order is given. **SPD** (The Throttle) controls the preselected settings for the engines, and therefore their speeds are measured as Full, Half, Slow, Stop, and Slow Reverse (shown as F, H, S, ST, S). **RIGHT** and **LEFT** movements of the joystick will move the throttle marker right and left to set your speed.

CURRENT SPEED displays the current speed of the ship in Knots. As with turning, it takes some time to get a 3,000 ton ship moving.

STATIONS

NA: Navigation

The particular path to be followed by the quartermaster (the sailor who actually turns the wheel) is defined on the map at this station. The view of a map boxed off into 100 squares, each 5,000 yards per side. The top is always North. Your position (white blip), and the position of islands (white squares), any friendly ships (moving dots), and your base (:-) are shown on this map. You may plot a course with up to 4 destination points on this map. To follow this course, the **AUT** switch on the bridge must be turned on.

- Set a course, first press the **FIRE BUTTON**. Then move the joystick to place point 1 on the spot where you want your next destination point, and press the **FIRE BUTTON** again. A bullet will appear to the right of your log entry at the bottom of the screen.
- Repeat this procedure until you are ready to place your last turn, then press the **FIRE BUTTON** twice. If you are at the fourth turn, you will automatically be finished and do not need to press the **FIRE BUTTON** twice.
- Replotting a course may be done when the Revive Orders Light (at the top left of the screen) is blinking.
- A record of your course is shown on the bottom half of the screen. The locations for your destination points are given in Longitude and Latitude. As you reach each destination point, a second bullet will appear next to the log entry.

BR: Bridge

This is the brain of the ship. Automatic function of the stations, course settings, speed, and crew reports are all available here. No other station contains as many controls as the Bridge. The view shows a control panel full of toggle switches and dials. The dials are all located on the bottom of the screen in the Helm section.

- Push the joystick **FORWARD**, or pull it **BACK** to select which row of controls to change. The green light at the far right of that row will flash to indicate which row you are on.
- Move the joystick **LEFT** or **RIGHT** to move across the screen to the different switch rows. A control is activated when the blue light next to it flashes.
- Press the **FIRE BUTTON** to turn the switch on or off. The light next to the switch is yellow when it is on and green when it is off.

The top row is for Status Reports for the Sonar, Radar, and Damage Control Stations. When each switch is toggled, a report will appear on the message line.

The second row from the top is for maneuvering orders from the Helm. Switches may be set for Pursuit (PUR), Evasive Action (EVA), Auto (AUT), or Manual (MAN) Helm control.

PUR (Pursuit): The ship automatically follows the closest enemy sub. This releases you to concentrate your attention on sinking that sub.

EVA (Evasive Action): To run an erratic course so that enemy ships, submarines, and aircraft have a harder time hitting you.

AUT (Automatic): To follow the course defined under the Navigation station. This frees you to patrol other areas and pay attention to your radar and sonar reports.

MAN (Manual): When a special maneuver is needed. (For example, to bring your torpedo tubes to bear on an enemy ship or drop depth charges.) When this is selected, the present course is suspended until Auto is reselected. Manual controls are directed from the Helm.

The next row controls the Crew Status. There are three levels available, General Quarters (GQ or "Battle Stations"), Condition 2 (COND2), and Condition 3 (COND3).

GQ (General Quarters): To turn on all weapon systems at one time. All weapons will fire automatically unless you go to a specific weapons station (Surface, Anti-Aircraft Guns, or Depth Charges), which then is under manual control.

COND2 (Condition 2): To turn on specific weapons so that you may selectively attack or defend using just those weapons. (The weapons may be selected using the last row of switches.)

COND3 (Condition 3): To turn off all weapons at once. This is a quick and easy way to secure from general quarters. When selected, all weapons are turned off!

Notes: Remember that if you leave any station at Battle Stations too long, the crew will become tired and not perform as well. If you don't need a particular station, leave it off so the screw can get some rest.

The last row of switches controls individual weapon stations automatically. Note that paired weapons (Surface Guns, Anti-Aircraft Guns, and Torpedoes) are activated or deactivated as a pair.

M (Surface Guns): Activate/deactivate both the Forward and Aft guns. These are the weapons you use to attack enemy ships or to pound enemy shore guns.

AA (Anti-Aircraft Guns): Activate/deactivate both the Port and Starboard Anti-Aircraft guns. Only the Anti-Aircraft guns can shoot down aircraft.

TP (Torpedoes): Both the Port and Starboard torpedo stations are controlled by this switch. Torpedoes are only effective against enemy ships.

DC (Depth Charges): Mounted on the stern, Depth Charges are activated with this switch. Submarines may only be attacked by Depth Charges.

The bottom of the screen has the speed and heading controls and indicators called the Helm. The Helm controls are as described previously.

OB: Observation Deck

To see the tactical situation visually from any direction, you can use the Observation Deck. The Observation Deck has the same Helm controls as the Bridge, with the addition of another control for the viewing angle.

The viewing angle is controlled by the dial located in the center of the screen. This dial allows you to turn and look in any direction regardless of the direction your ship is facing, or to lock in a view in the ship's current heading.

- Push the joystick **FORWARD** to select the window and press your **FIRE BUTTON**. The perimeter around the window will toggle from a light gray to a dark gray.

- When the perimeter is light gray, move the joystick **RIGHT** or **LEFT** to change the viewing angle in any direction. Press the **FIRE BUTTON** to lock in the forward view. The perimeter around the window will turn dark gray until you press the **FIRE BUTTON** again.

RA: Radar

Radar allows a ship to spot enemy ships and aircraft at much greater distances than a telescope. Some course corrections may be needed depending on what is seen on the radar, therefore the Helm controls are duplicated here.

GF, GA Guns Forward/Guns Aft
AP, AS Anti-Aircraft Guns Port/Anti-Aircraft Guns Starboard
TP, TS Torpedoes Port/Torpedoes Starboard
DC Depth Charges
DA Damage Control

There are also two additional codes to be used in particular circumstances:

TR: Used at the Surface Guns station to activate the Targeting Radar.

AB: When all else fails – Abandon Ship to end the current mission.

Helm

There is a special set of controls that appears at the bottom of the screen on four of the stations above (Observation Deck, Bridge, Radar and Sonar). This special section is called the Helm. It allows you to control the heading and speed of the ship. Push the joystick **FORWARD** or pull **BACK** until the green light flashes next to the item you wish to change.

STEER TO allows you to set the course you wish to follow. **RIGHT** and **LEFT** movements of the joystick will move the dial right and left. The new course setting is shown at the center of the dial under the marker. Press the **FIRE BUTTON** to set it to automatic. The dial will turn black to indicate this, and the joystick has no effect until the **FIRE BUTTON** is pressed again. (When on automatic, the **AUT** switch at the Bridge reflects the same.)

CURRENT HEADING shows exactly where the bow of the Destroyer is pointing. It takes time to turn a 3,000 ton ship around, so don't be surprised if you see that dial moving after a new heading (**STEER TO**) order is given. **SPD** (The Throttle) controls the preselected settings for the engines, and therefore their speeds are measured as Full, Half, Slow, Stop, and Slow Reverse (shown as F, H, S, ST, S) **RIGHT** and **LEFT** movements of the joystick will move the throttle marker right and left to set your speed.

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- Set a course, first press the **FIRE BUTTON**. Then move the joystick to place point 1 on the spot where you want your next destination point, and press the **FIRE BUTTON** again. A bullet will appear to the right of your log entry at the bottom of the screen.
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- A record of your course is shown on the bottom half of the screen. The locations for your destination points are given in Longitude and Latitude. As you reach each destination point, a second bullet will appear next to the log entry.

BR: Bridge

This is the brain of the ship. Automatic function of the stations, course settings, speed, and crew reports are all available here. No other station contains as many controls as the Bridge. The view shows a control panel full of toggle switches and dials. The dials are all located on the bottom of the screen in the Helm section.

- Push the joystick **FORWARD**, or pull it **BACK** to select which row of controls to change. The green light at the far right of that row will flash to indicate which row you are on.
- Move the joystick **LEFT** or **RIGHT** to move across the screen to the different switch rows. A control is activated when the blue light next to it flashes.
- Press the **FIRE BUTTON** to turn the switch on or off. The light next to the switch is yellow when it is on and green when it is off.

The top row is for Status Reports for the Sonar, Radar, and Damage Control Stations. When each switch is toggled, a report will appear on the message line.

The second row from the top is for maneuvering orders from the Helm. Switches may be set for Pursuit (PUR), Evasive Action (EVA), Auto (AUT), or Manual (MAN) Helm control.

PUR (Pursuit): The ship automatically follows the closest enemy sub. This releases you to concentrate your attention on sinking that sub.

EVA (Evasive Action): To run an erratic course so that enemy ships, submarines, and aircraft have a harder time hitting you.

AUT (Automatic): To follow the course defined under the Navigation station. This frees you to patrol other areas and pay attention to your radar and sonar reports.

MAN (Manual): When a special maneuver is needed. (For example, to bring your torpedo tubes to bear on an enemy ship or drop depth charges.) When this is selected, the present course is suspended until Auto is reselected. Manual controls are directed from the Helm.

The next row controls the Crew Status. There are three levels available, General Quarters (GQ or "Battle Stations"), Condition 2 (COND2), and Condition 3 (COND3).

GQ (General Quarters): To turn on all weapon systems at one time. All weapons will fire automatically unless you go to a specific weapons station (Surface, Anti-Aircraft Guns, or Depth Charges), which then is under manual control.

COND2 (Condition 2): To turn on specific weapons so that you may selectively attack or defend using just those weapons. (The weapons may be selected using the last row of switches.)

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Notes: Remember that if you leave any station at Battle Stations too long, the crew will become tired and not perform as well. If you don't need a particular station, leave it off so the screw can get some rest.

The last row of switches controls individual weapon stations automatically. Note that paired weapons (Surface Guns, Anti-Aircraft Guns, and Torpedoes) are activated or deactivated as a pair.

M (Surface Guns): Activate/deactivate both the Forward and Aft guns. These are the weapons you use to attack enemy ships or to pound enemy shore guns.

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TP (Torpedoes): Both the Port and Starboard torpedo stations are controlled by this switch. Torpedoes are only effective against enemy ships.

DC (Depth Charges): Mounted on the stern, Depth Charges are activated with this switch. Submarines may only be attacked by Depth Charges.

The bottom of the screen has the speed and heading controls and indicators called the Helm. The Helm controls are as described previously.

OB: Observation Deck

To see the tactical situation visually from any direction, you can use the Observation Deck. The Observation Deck has the same Helm controls as the Bridge, with the addition of another control for the viewing angle.

The viewing angle is controlled by the dial located in the center of the screen. This dial allows you to turn and look in any direction regardless of the direction your ship is facing, or to lock in a view in the ship's current heading.

- Push the joystick **FORWARD** to select the window and press your **FIRE BUTTON**. The perimeter around the window will toggle from a light gray to a dark gray.

- When the perimeter is light gray, move the joystick **RIGHT** or **LEFT** to change the viewing angle in any direction. Press the **FIRE BUTTON** to lock in the forward view. The perimeter around the window will turn dark gray until you press the **FIRE BUTTON** again.

RA: Radar

Radar allows a ship to spot enemy ships and aircraft at much greater distances than a telescope. Some course corrections may be needed depending on what is seen on the radar, therefore the Helm controls are duplicated here.

GF, GA Guns Forward/Guns Aft
AP, AS Anti-Aircraft Guns Port/Anti-Aircraft Guns Starboard
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- Push the joystick **FORWARD**, or pull it **BACK** to select which row of controls to change. The green light at the far right of that row will flash to indicate which row you are on.
- Move

Radar operates on the principal of bouncing radio beams off of a ship or plane and timing how long it takes the beams to return. This gives the approximate distance. The direction the antenna is pointing gives the bearing to the target. The range of the radar is approximately as 13,500 yard radius. Islands are shown as white squares, ships as blips, and squadrons of air-planes as pluses. The top of the screen is always north. So if a target is seen on the bottom RIGHT hand side of the display, it is approximately south-east of you. This might be over your bow, or on your Starboard beam.

SO: Sonar

The only way to see a submerged submarine is to use the Sonar. Some course corrections may be needed depending on what is seen on the sonar, therefore, the Helm controls are duplicated here.

Sonar works on the principal of sending sound waves through the water and timing how long they take to return after bouncing off of an enemy submarine. The direction of the transponder (sonar "antenna") determines the range. This sonar will show the position of enemy submarines (blips) within an approximate radius of 13,500 yards around you, as well as the positions of islands. But beware: sudden, fast-moving blips heading toward you are torpedoes!

GF: Gun Forward

GA: Gun Aft

When enemy ships are nearby, the 5" guns may be used to fire on them. The guns are also used to support the marines when they hit the beach. Each time the gun is fired, it will take several seconds to reload it. Repeated hits are required to sink a ship or eliminate a gun emplacement.

These stations show the ocean, the 5" gun, the bow or stern, and a set of controls and indicators. General fire control follows the following procedure. Keep in mind that it may be more difficult to shoot freehand than with the targeting radar.

- Move the gun up or down (change the Point) by pushing the joystick FORWARD or pulling BACK.
- Move the gun right or left (change the Train) by moving the joystick LEFT or RIGHT. As the gun moves, you will notice the indicators change.
- Press the FIRE BUTTON each time you wish to fire the gun.
- Wait to reload, then continue firing on selected targets, making adjustments as needed. Be sure to watch the number of rounds you have left. You can also select and lock the radar onto a target by using your sweep controls.
- Type TR for Targeting Radar, then press RETURN. This will activate the Radar Sweep Display on the lower left corner of the station, and the blue light below it will flash. (This will be red if the radar is damaged.)
- Move the joystick LEFT or RIGHT to move the sweep left or right.
- Line up the sweep with one of the blips shown on the radar screen, then press the FIRE BUTTON.
- The yellow light will flash below the radar, indicating that it is calculating. As soon as the green light flashes, the target has been locked in.

Line up the top pointers under TRAIN and POINT with those pointers underneath (controlled by radar) by moving the joystick RIGHT, LEFT, FORWARD, and BACK.

When the pointers connect, press the FIRE BUTTON to shoot.

Wait to reload, and continue the same process until you've eliminated your target, then select another.

INDICATORS:

Train: The number of degrees that the gun is off the centerline of the ship. (+) positive values are to the right, and (-) negative values are to the left.

Point: The number of degrees that the gun is off the horizon. The maximum is 50°, the minimum is 0° and the maximum range is at 45°.

Range: How far the radar locked target is in yards.

Target: How far away the shell from the gun will land at the given point value.

Rounds Left: The two-digit number on the bottom right of the screen which indicates the number of shells left for that gun.

Reload: Flashes to show that reloading is in process.

Fire: Flashes green when ready to shoot.

AP: Anti-Aircraft Gun Port

AS: Anti-Aircraft Gun Starboard

When attacked by enemy warplanes, use these rapid-fire guns to shoot back. But remember, they have no effect against ships, submarines, or islands. The screen shows the port or starboard view of the ocean, along with any attacking aircraft that are close enough to be seen in that direction.

- Push the joystick FORWARD or pull BACK to move the gun up or down (to change the Pointing).
- Move the joystick RIGHT or LEFT to move the gun right or left (to change the Train). As the gun moves you will notice the indicators change.
- To target and shoot at a plane, move the joystick so that the cross-hairs BUTTON once for single shots, or hold it down for a faster pulse of shells. Watch your temperature light!

INDICATORS:

Train: The number of degrees that the gun is off the centerline of the ship. (+) positive values are to the right, and (-) negative values are to the left.

Point: The number of degrees that the gun is off the horizon. The maximum is 50°, the minimum 0° and the maximum range is at 45°.

Range: Indicates rounds per minute. The longer you continue to fire, the slower the rounds per minute.

Temperature Lights: (Green, Yellow, Red) correspond to the R: readout above. A red light indicates that the gun is overheated and not functional. It must be left alone for several seconds so that it may cool.

Scoreboard: On the right and left bottom parts of the screen is a running total of the number of aircraft destroyed by that gun. A plane appears here for each one destroyed.

TP: Torpedoes Port

TS: Torpedoes Starboard

Torpedoes were used to destroy other ships at ranges greater than the guns. They were the only effective way of attacking a cruiser or destroyer, as the destroyer's guns could not penetrate the big ships' armor plating. Torpedoes are not resupplied – once used, there are no more available for that mission. This station shows the view from the side of the ship (port or starboard), along with the torpedoes mount. Below are the controls and indicators.

- Move the joystick RIGHT or LEFT, to move the torpedo mount when the range marker (aiming point) is over a ship.
- Press the FIRE BUTTON to launch a torpedo. If the distance is great you will have to "lead" the target ship by aiming in front of it.

NOTE: Keep in mind that both you and the target are moving and probably not parallel to each other.

INDICATORS:

Tube Number: Each torpedo (of the five per side) is automatically selected for you. Each time you fire one, the light will turn red. When the next light flashes green, you are ready to launch another torpedo.

Status Lights: (Red, Green) When the Status light (under the station number) is green, the torpedo is operational. If it is red, then damage has occurred and you must wait until Damage Control has fixed it.

Train: The number of degrees that the gun is off the centerline of the ship. (+) positive values are to the right, and (-) negative values are the left.

DC: Depth Charge

Depth Charges are used to destroy enemy submarines. They are basically very similar to airplane bombs, but are dropped through the water. Instead of striking the ground they are designed to detonate at a certain depth. By varying the pattern and depth settings of depth charges you can bracket the enemy sub and hopefully destroy it.

This station shows the view looking over the stern section of the ship. The depth charge launchers are shown in the view. There are two K-guns that shoot depth charges off the side, and two stern racks that roll them off the back. Below the view are the controls and indicators to select, fuse, and fire the depth charges.

- To select one of the four launchers move the joystick RIGHT or LEFT. The blue light will flash, indicating which launcher has been selected.
- Depth settings are controlled by pushing the joystick FORWARD OR pulling BACK to increase or decrease the depth setting.

To fire a depth charge press the FIRE BUTTON. The depth charge will be launched into the water and will explode at the depth setting shown for that launcher. While the launcher flashes red, it is not operational.

INDICATORS:

Select Launcher: Flashes blue to show you which of the four launchers is selected.

Depth Charges Remaining: The two-digit number displays how many depth charges are still available to fire from that launcher.

Status: (Red/Green) Immediately after a depth charge is launched, the status light will show red since the launcher must reload. When the launcher is ready to fire, the status light will glow green. When a launcher is damaged, both the lights will flash.

DA: Damage Control

When you have received damage from enemy attacks, the damage control parties will attempt to fix it for you. The four damage control parties can be manually reassigned to any damaged stations from Damage Control.

The station shows each major item on the ship listed both above and below a side view of a Fletcher class destroyer. Below this display are the four damage control teams in order of their repair speed: Alpha, Baker, Charlie, and Delta.

- Select a team by pushing the joystick FORWARD or pulling it BACK. The blue light will flash, indicating which team has been selected.

- Select the station to be repaired by moving the joystick RIGHT or LEFT. The selected item will turn to the color of the chosen repair team.
- Press the FIRE BUTTON to receive a report on that station from its repair crew.
- Then assign another team, if needed, or move the present team elsewhere.
- To "turn off" a crew, cycle it through the list with the joystick and exit the screen at the top left or bottom right.

Note: The damage control team resupplies ammunition (except torpedoes, which are not replaced) when repairs are complete.

INDICATORS:

Team Colors: Alpha-Red, Baker-Yellow, Charlie-Blue, Delta-Green.

Damage: Indicated when an area flashes.

Repairs: Shown as being underway when the one of the ship's stations or areas flashes in the color of the damage control party working on it.

CAPTAIN'S NOTES

Call them "tin cans", "greyhounds", or "small boys", these small, fast ships were called upon to do an amazing variety of tasks throughout World War II. Ready to fight off hostile dive bombers, trading shots with enemy destroyers, cruisers, and even battleships, or waging a cat-and-mouse war with submarines, these were the destroyers and destroyer escorts of the U.S. Navy. They were scouts, gun platforms, weather reporters, blockaders, troop and supply transports, front-line guards, search and rescue ships, radar pickets, mail deliverers, and surface raiders. They could do everything from dropping a small party of scouts on a tiny Pacific atoll to supporting a vast fleet in the invasion of a continent.

When the United States entered World War II in December of 1941, the navy had about 172 destroyers on hand, with 72 of these being World War I vintage ships. By the middle of 1942, the first of the new DD-445 class ships, the Fletcher, was underway. A total of 175 ships of this class were eventually built and although two more destroyer types (the Sumner and Gearing classes) were manufactured in the last year of the war, the Fletcher remained the front-line destroyer of World War II.

Weapons

Guns: The Fletcher's main armament was her five 5-inch/38 caliber dual-purpose, semi-automatic guns used for anti-aircraft, shore bombardment and surface firing. They could use a variety of ammunition, including common, armor-piercing, illumination, variable time, and proximity-fused shells. These anti-aircraft shells held a miniature radio transceiver which would explode the shell when it came near the target. The 5-inch/38 caliber gun could fire on a surface target some nine miles away or at air targets up to five miles high. Although the guns could be sighted and fired from within, they usually were controlled from the gun director station sitting high above the bridge by using a fire-control radar and onboard computers to calculate the target's position.

The secondary battery was composed of the 40 mm rapid-fire, automatic, watercooled twin guns. These anti-aircraft guns were capable of firing about 160 rounds per minute to about 2800 yards and could also be controlled by remote.

For close-in defense, there were the 20 mm air-cooled automatic anti-aircraft guns. Manually controlled, they had an effective range of about 3500 yards. It's said that when the crew members deep inside the ship heard the distinctive chatter of these 20 mm guns firing, it served as the warning of an imminent crash by a Kamikaze aircraft.

Torpedoes: The Fletcher's conventionally carried ten 21" diameter torpedoes in two quintuple mounts along the centerline. These mounts could rotate 360 degrees to fire off of either side of the ship. The torpedoes were propelled by an air-alcohol-water-gas-turbine system capable of sending the 2215 pound "fish" with its 780 pound explosive charge some three miles at 45 knots or some seven miles at 25 knots. The U.S. torpedo was plagued by difficulties during the war and could not match the performance of the Japanese-designed "Long Lance" torpedo. These oxygen-driven, practically wakeless 24" torpedoes carried a 1,000-pound explosive and ran approximately eleven miles at 50 knots or thirty miles at 36 knots.

Depth Charges: The main anti-submarine weapon of the destroyer was the 36-inch long, 18" diameter depth charge or "ash can". Containing some 300 to 600 pounds of TNT, these deadly devices were activated by variable-depth fuses which were basically bellows, operated by water pressure. Later, a teardrop shaped depth charge was developed, which was more accurate due to its streamlined shape. The Fletchers usually carried six depth charge projectors (K-Guns) – three on each side – and two racks to rail charges off the stern.

Sensing

The first American search radar set off to sea in 1937. Later improvements produced surface and air search radars. Quite often, radar was used to catch an unsuspecting submarine carelessly loitering on the surface. As early as 1934, the United States was experimenting with echo-ranging devices, and by 1939, some 60 destroyers in the U.S. fleet were equipped with sonar. Only highly trained and experienced men were skilled enough to make sense of the "pings" returned from an unidentified object amid the underwater noise.

Engineering

The most important mechanical system onboard was the engineering section. To provide the ship with electricity, heat, ventilation, fresh water, and power, the engineering plant consisted of a myriad of boilers, engines, pumps, motors, and generators. Actual design allowed for two separate systems – each capable of running the ship in the event of damage to the other.

Crew

The crew consisted of 306 enlisted men and 19 officers, lead by the commanding officer (always called the Captain, regardless of his military rank). He was responsible for the ship as a whole, its safety and operation, and the performance and welfare of the crew. The Executive Officer ("Exec") assisted the Captain, and beneath him were the various departmental officers – including gunnery, construction and repair, navigation, engineering, and supply.

When in a war zone, about one-third of the crew was on duty at all times. Three rotating watch sections had four hours "on" and eight hours "off". "General Quarters" (Battle Condition 1) was sounded when enemy contact was made, unidentified planes or ships approached, or at dawn and dusk when bad visibility made operations hazardous. All hands reported to their battle stations immediately. Under Battle Conditions 2 and 3 (war cruising), all sensors and lookout stations were manned, and half the armament was ready for action.

GENERAL DATA

DIMENSIONS

LENGTH: Waterline 369' 3" Overall 376' 6"

BEAM: 39' 8"

DRAFT: Full Load 17' 9"

DISPLACEMENT: Standard 2050 tons Full Load 3050 tons

LIQUID LOAD

FUEL OIL: 137,740 gal. DIESEL OIL: 6,772 gal.

POTABLE WATER: 16,939 gal.

MACHINERY:

BOILERS: FOUR Babcock & Wilcox double furnaces, express type, water tube (M-type).

STEAM PRESSURE: 615 psi

STEAM TEMPERATURE: Saturated – 490°F. Superheated – 850°F.

ENGINES: TWO Westinghouse double-reduction geared turbines. Shaft Horsepower – 60,000 Propellers TWO Speed – 36 knots

Cruising radius at 15 knots – 6,000 miles

ARMAMENT

FIVE 5"/38 caliber dual purpose Surface Range: 18,200 yards at 45°

elevation Air Range: 37,200 feet at 85° elevation

TEN 40 mm Anti-Aircraft Surface Range: 11,000 yards at 42° elevation

Air Range: 22,800 feet at 90° elevation

SEVEN 20 mm Anti Aircraft Surface Range: 4,800 yards at 35° elevation

Air Range: 10,000 feet at 90° elevation

TEN 21" torpedo tubes in two quintuple banks

TWO Depth Charge Tracks

SIX Depth Charge Projectors (K-Guns)

Glossary of Ship Terms:

The Stern, Bow, Deck, Hull, Bridge, Centerline are all parts of a ship.

Stern: The rear section of the ship.

Bow: The front section of the ship.

Deck: A platform extending from one side of a ship to the other.

Hull: The body of the ship.

Bridge: The "brain" of the ship from which the Captain normally gives orders.

Centerline: The center of the ship, from bow to stern.

Port, Starboard, Aft, and Fore are usually used to describe the relative location of an object in relation to the ship.

Port: The left side of the ship if you are looking at the bow.

Starboard: The right side of the ship if you are looking at the bow.

Aft: Towards the rear section (stern) of the ship.

Fore: Towards the front section (bow) of the ship.

Admirships: Midway between the bow and the stern.

These terms have to do with steering the ship or controlling weapons.

Heading: The direction on the compass that the ship is travelling.

Bearing: The direction on the compass that an object is from your ship.

Point: The angle (number of degrees) that is up or down from the horizon.

Train: The angle (number of degrees) of a weapon from its normal position, usually centerline or at a right angle to centerline of the ship.